UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA

-V-

ANTON PERAIRE-BUENO and JAMES PERAIRE-BUENO,

Defendants.

24-CR-00293 (JGLC)

[FILED PARTIALLY UNDER SEAL]

REPLY IN FURTHER SUPPORT OF NONPARTY-1'S MOTION TO QUASH

PRYOR CASHMAN LLP 7 Times Square, Suite Level 40 New York, NY 10036 Tel: (212) 421-4100

TABLE OF CONTENTS

TABLE	OF AUTHORITIES	ii
PRELIN	MINARY STATEMENT	1
I.	The Protective Order Is Insufficient to Protect Nonparty-1	1
II.	The Court Should Quash Request Numbers 1-3 (bot source code, smart contract code, communications with builders)	2
	A. Defendants failed to demonstrate relevance	2
	 Defendants failed to show that the requested documents make it less likely that searchers reasonably expect trades proposed in bundles to be executed only in the proposed order 	3
	2. Defendants failed to show that the requested code make it less likely that the bundle proposed by the MEV Bot was "typical" or that typicality is a fact of consequence	5
	B. These requests are overbroad	7
	C. The Court should not force Nonparty-1 to take on the burden of creating and producing the requested code	8
III.	The Court Should Quash Request Numbers 4-7 (communications with third parties)	9
	A. Defendants failed to make a sufficient showing of admissibility	9
	B. Defendants failed to establish relevance	10
	C. These requests are overbroad	12
IV.	The Court Should Quash Request Numbers 8 and 9 (other MEV Bots, financial records)	13
CONCI	LISION	15

TABLE OF AUTHORITIES

PAGE(s)	
<u>CASES</u>	
United States v. Barnes, 2008 WL 9359654 (S.D.N.Y. Apr. 2, 2008)9	
United States v. Litvak, 808 F.3d 160 (2d Cir. 2015)4	
United States v. Munteanu, 2013 WL 6194343 (E.D.N.Y. Nov. 26, 2013)	
United States v. Nixon, 418 U.S. 683 (1974)	
United States v. Rich, 1984 WL 845 (S.D.N.Y. Sept. 7, 1984)9	
United States v. Shestakov, 2025 WL 507523 (S.D.N.Y. Feb. 14, 2025)10	
United States v. Treacy, 2008 WL 5082884 (S.D.N.Y. Dec. 1, 2008)9	
United States v. Weisberg, 2010 WL 5027537 (E.D.N.Y. Dec. 3, 2010)	
STATUTES AND RULES	
Fed. R. Evid. 401	
Fed. R. Evid. 804(b)(3)	

PRELIMINARY STATEMENT

Defendants improperly seek to compel one of their victims to produce documents that they can use to victimize them again. It would be unjust to permit Defendants to abuse their subpoena power in this way. Defendants also have failed to meet their burden of establishing that their requests meet the requirements that the Supreme Court set forth in *United States v. Nixon*, 418 U.S. 683 (1974). Accordingly, the Court should grant Nonparty-1's motion to quash.

I. The Protective Order Is Insufficient to Protect Nonparty-1.

Defendants' suggestion in their Opposition that there is no basis to believe that they "might misuse [Nonparty-1's] proprietary information" because they "are not charged with a hacking crime" is absurd. (Opp. at 5.) Even if the "vulnerability" in the MEV-Boost software that they allegedly used in connection with the 'Exploit' was publicly available for anyone to identify and use" (*id.*), Defendants were the only ones sufficiently sophisticated and unethical to exploit this vulnerability. Allowing someone who has been charged with a crime involving exploitation of software vulnerabilities to access a victim's proprietary software and review it for vulnerabilities or potential trading advantages simply because the charged crime is wire fraud and not computer hacking is ludicrous.

The Protective Order does not resolve these concerns. Disclosing these trade secrets to (i) Defendants, (ii) MEV-Boost "experts" retained by Defendants' counsel as advisors, or (iii) MEV-Boost "experts" retained as potential expert witnesses would put Nonparty-1 at risk of further criminal acts such as the exploitation of vulnerabilities in its code, as well as commercial harms such as taking advantage of its proprietary trading strategies. It appears that only an Attorney's Eyes Only designation (ECF No. 25, ¶¶ 4, 8) would prevent Defendants from accessing the code or learning of its content, but the Protective Order does not appear to authorize Nonparty-1 to make such a designation. More importantly, it is unlikely that Defendants' counsel have the ability to

Order that this designation would prevent Defendants from identifying third party MEV-Boost "experts" to be retained by Defendants' counsel and then provided with the software. The community of sophisticated users of the MEV-Boost ecosystem is a small one, and providing Nonparty-1's trade secrets to other users would necessarily put Nonparty-1 at risk. Where, as here, Defendants have failed to establish that trade secrets they demand are relevant and necessary for their trial preparation (for reasons discussed below), it is inappropriate to subject their victims to risk of further harm by compelling them to produce documents revealing these trade secrets.

II. The Court Should Quash Request Numbers 1-3 (bot source code, smart contract code, communications with builders)

A. Defendants failed to demonstrate relevance.

As explained in Nonparty-1's Memorandum, Defendants failed to satisfy their burden to demonstrate the relevance of the documents that they sought in their application for a Rule 17(c) subpoena because they (i) failed to articulate what they meant by the vague concepts of the "mechanics of the trades" and "Victim Traders' expectations regarding their trades"; (ii) failed to articulate why, whatever those phrases mean, they were relevant; and (iii) failed to establish that the requested documents would make those facts more or less likely. Now, in their attempt at a second bite of the apple in their Opposition, Defendants have again failed to meet that burden.

Defendants' first strategy is to contend that because the Superseding Indictment alleges that "smart contracts . . . are computer code," and because "MEV Bots . . . are also computer code," any code they want is relevant because it "relate[s] to" the allegations. (Opp. at 8.) This suggestion that a requested document is relevant if it simply *relates* to *some* fact mentioned in the Superseding Indictment, regardless of how tenuous that relationship is or how inconsequential the fact is (Opp. at 7), is incorrect. Defendants must establish the relevance of a requested document by

demonstrating that the requested document "make[s] a fact more or less probable" and that this "fact is of consequence in determining the action." See Fed. R. Evid. 401. Defendants therefore must identify a fact that is "of consequence" and demonstrate that the requested document tends to prove that fact. See United States v. Weisberg, 2010 WL 5027537, at *2 (E.D.N.Y. Dec. 3, 2010) (granting motion to quash "because Defendant has not established . . . that the categories of documents he seeks . . . consist of evidence that would tend to prove a material issue of the case"); United States v. Munteanu, 2013 WL 6194343, at *3 (E.D.N.Y. Nov. 26, 2013) ("With respect to the first Nixon factor, the Court finds that the document sought is not evidentiary or relevant because it does not tend to prove a material fact in the case.").

Rather than establish that the documents sought in Requests Numbers 1-3 make a fact of consequence more or less likely, Defendants pluck phrases from the Superseding Indictment and government filings concerning "expectations" and "typical" bundles, rewrite these phrases to allege different facts that were not mentioned in the Superseding Indictment, assume without argument that these newly minted factual allegations are facts of consequence, and then speculate that the requested documents may relate to these re-written factual allegations and therefore make them more or less likely. But sophistry is insufficient under *Nixon*.

1. Defendants failed to show that the requested documents make it less likely that searchers reasonably expect trades proposed in bundles to be executed only in the proposed order.

Defendants first try to manufacture relevance by taking a statement from a government brief that the "Victims were relying on the expectation that their trades would be executed only in a particular order" and broadening it to suggest that *all* "expectations" held by *all* participants in the MEV-Boost ecosystem or Ethereum Network as a whole are facts of consequence to the charges against Defendants. (Opp. at 8 (quoting ECF 91 at 12).) That maneuver is improper. The only "expectation" the government suggested may be a fact of consequence is the expectation that

trades submitted in a proposed bundle "would be executed only in a particular order," as described in Paragraph 13 of the Superseding Indictment. Accordingly, to demonstrate that a requested document is relevant, Defendants must show that the document makes this expectation more or less likely. It is not sufficient to suggest that documents make different expectations, such as an expectation "that one feature of the trading environment is its adversarial nature" (Opp. at 9) more or less likely.

Moreover, in arguing that the Victim Traders' expectation regarding transaction order is not "background" (id. at 8), Defendants improperly conflate the applicable objective expectation about the order of bundled transactions, which is central to the charges, with the Victim Traders' subjective expectation about bundle order, which is background rather than necessary to establish the charges against Defendants. Defendants do this by observing that "the Indictment appears to rely on alleged expectations and norms (and alleged breach thereof) for its theories of falsity and materiality," which are *objective* expectations, and then quoting statements made in a government brief about the Victim Traders' expectations, as if subjective expectations are the same thing as objective expectations. (Id. (quoting ECF 91 at 12).) As argued in the Memorandum, and conceded by Defendants, the test for whether a matter is material or false is objective. 1

¹ Rather than dispute this legal point, Defendants note that in the securities fraud case *United States* v. Litvak, 808 F.3d 160, 175-76, 184 (2d Cir. 2015), the court mentioned testimony from several of the defendant's counterparties concerning the importance of the defendant's misrepresentations and how they caused injury to them as evidence of materiality. (Opp. at 10.) This in no way supports the inference that subjective beliefs about materiality were "facts of consequence." Rather, the court made clear that the "fact of consequence" was whether "a reasonable investor would find the . . . misrepresentation important in making an investment decision." Id. at 175 (quote omitted). The court merely concluded that the testimony from the defendants' counterparties explaining why the misrepresentations were important helped establish that objective fact of consequence. In this case, the government may well offer similarly devastating evidence from the Defendants' victims explaining why it was objectively reasonable to expect that proposed trades would be executed only in a particular order. This does not change the objective standard into a subjective standard. Moreover, Defendants have not, and could not, establish here

Accordingly, in evaluating whether the requested documents make those expectations about bundle order more or less likely, the Court should focus on objective expectations.

Critically, however, even if the Victim Traders' subjective expectations were a fact of consequence, Defendants have offered nothing but unfounded speculation that the documents sought would reveal those expectations. The closest Defendants come to supporting this speculation is the following obviously fallacious reasoning: "If the alleged Victim Traders are supposed to have been defrauded as a result of the statements made by the Peraire-Buenos, and the alleged Victim Traders are supposed to have acted entirely through their MEV Bot to create proposed bundles via smart contracts, the requested materials would reveal the alleged Victim Traders' purported expectations for the trades at issue." (Id. at 9.) The suggestion that a person "acting through" an instrumentality implies that the instrumentality reveals that person's expectations is nonsense. For example, someone using a telephone for a phone call does not imply that examining the telephone will reveal the caller's intent. Neither can one discover a driver's intent by examining their car. Defendants have offered no reason whatsoever to infer that the requested bot source code or smart contract code, will "reveal" whether the authors of the code expected trades proposed in bundles to be executed only in the proposed order. In particular, there is no reason to think that code calculating whether and when to propose a bundle would contain information about expected bundle order beyond what is evident in the proposed bundle itself, which is the relevant output of the trading calculations reflected in the code. Defendants' speculation that this code might relate in some unarticulated way to "expectations" is insufficient to establish relevance.

that the only evidence of what expectations were objectively reasonable is the materials of the Victim Traders. Evidence concerning the objectively reasonable expectations of other searchers and other Ethereum Network participants is readily available.

2. Defendants failed to show that the requested code make it less likely that the bundle proposed by the MEV Bot was "typical" or that typicality is a fact of consequence.

Defendants also attempt to manufacture relevance through an incomprehensible repurposing of a single reference in the Superseding Indictment to what a searcher's bundle "typically consists of." (Indict. ¶ 13.) The Superseding Indictment notes that a bundle "typically consists of the following transactions in a precise order" and then lists three transactions: the frontrun transaction, the pending transaction, and the searcher's sell transaction. (Id.) Defendants pluck the word "typical" out of context and suggest that whether the bundles described in the Superseding Indictment were atypical in any way is a matter of consequence and they should therefore be permitted to explore any way in which the bundle may have been atypical. (Id. at 8, 10.) However, the only "fact of consequence" Defendants identified in the Superseding Indictment is whether the three transactions were in the particular order listed in Paragraph 13.

When this "fact of consequence" is understood in the context of the Superseding Indictment, rather than Defendants' self-serving misinterpretation, it is apparent that Defendants cannot possibly show that they need the requested code to prepare for trial or that the information about the order of the bundle is not otherwise procurable reasonably in advance of trial by exercise of due diligence. *Nixon*, 418 U.S. at 699-700. Defendants know the proposed transaction order of the bundles proposed by the Victim Traders, because they *received* these bundled transactions in the block template sent to them from the relay. (*See* Mem. at 7 (citing Indict. ¶ 26).) Defendants do not deny this in their Opposition. They have offered no basis whatsoever to conclude that the bot source code or the smart contract code would somehow make it more or less likely that the bundles that the Victim Traders submitted were "typical" in the sense they consisted of a frontrun transaction, the pending transaction, and the searcher's sell transaction, in that order. Defendants' suggestion that "typicality" is a disputed fact that they need Nonparty-1's code to resolve therefore

6

appears to be pretextual. Defendants know the transactions proposed in the bundle, and they have no need to access the proprietary trading code that led to the transmission of these proposed bundles to confirm this fact.

Moreover, regarding the smart contract, Defendants already have the bytecode and they have not articulated any reason to believe that the source code that was compiled into the bytecode will somehow shed additional light on the uncontested fact that the proposed bundles identified in the Superseding Indictment contained a frontrun transaction, a pending transaction, and the searcher's sell transaction, in that order. Instead, they merely observe that the "way the contract is organized, function naming, and comments" would not be in the bytecode (Opp. at 10-11), but fail to offer any basis for inferring that these facts would make the proposed bundle order, or any other fact of consequence, more or less likely.

B. These requests are overbroad.

Defendants have failed to establish that any records sought by Request Numbers 1-3 are relevant, but even if they had shown that some portion of the requested code was relevant, their request still would be grossly overbroad. Defendants argue that "[b]ecause the Indictment does not allege *how* the MEV Bot determines or accomplishes its trading strategy (just that it does), the Peraire-Buenos are entitled to the entirety of the MEV Bot code." (*Id.* at 11.) However, this attempt to obtain information about Nonparty-1's trading strategy is the very reason why Defendants are *not* entitled to the source code at all. The facts of consequence identified in the Superseding Indictment include that the MEV Bot transmitted a particular proposed bundle, and the (objective) expectations concerning the order of the transactions within proposed bundles. The bundle transmission was the *output* of the MEV Bot's complex trading calculation, but this does not make relevant the trading calculation that preceded that output. Each of the six portions of the bot source code the Defendants identify pertains to complex steps leading to the proposal of a

particular bundle that reflect various aspects of the trading strategy used by the authors of this source code. While Defendants may want to review this code to gain a trading advantage over Nonparty-1 in the future, they have not established that information about these complex internal trading calculations are independently facts of consequence in this action. Therefore, even this narrowed request seeks only material whose relevance Defendants have failed to establish and therefore remains overbroad.

C. The Court should not force Nonparty-1 to take on the burden of creating and producing the requested code.

In light of the absence of relevance, the burden that Defendants seek to impose on Nonparty-1 is undue. *See United States v. Cognetta*, 2019 WL 4198544, at *5 (S.D.N.Y. Aug. 13, 2019) (granting motion to quash because requested documents "are not relevant . . . and that [the nonparty's] compliance with the request . . . would be unduly burdensome"). Moreover, Defendants ignore the primary thrust of Nonparty-1's argument, which is that "Nonparty-1 does not possess a discrete record of 'the source code' that can be readily produced" and to create this source code would need to review hundreds of files and "identify the correct branch/commit that was running at the time of the exploit, download it, and carefully review it to remove various forms of proprietary information including private key information." (Mem. at 9.) Nonparty-1 further explained that creating this source code would be subject to error. (*Id.*) Defendants do not contest this. Accordingly, they cannot compel Nonparty-1 to create the code that they request.²

_

² Defendants explained to Nonparty-1 during a meet-and-confer that Request Number 3, seeking the "communications with and transmissions to and from the builders regarding the proposed bundles for the April 2, 2023 transactions," is limited to contemporaneous communications on April 2, 2023, such as the transmission of the proposed bundles and any response thereto, not communications subsequent to the Exploit. On that understanding, Nonparty-1 does not seek to quash Request No. 3 and will produce any responsive materials that are in its possession, custody or control.

III. The Court Should Quash Request Numbers 4-7 (communications with third parties)

A. <u>Defendants failed to make a sufficient showing of admissibility.</u>

In Request Numbers 4-7, Defendants are requesting the production of out-of-court statements, which means they likely will consist of hearsay. Defendants argue that "the inquiry is simply whether the documents are *arguably* admissible." (Opp. at 18.) Defendants are wrong: Documents "must be *shown* to [be] relevant and admissible at the time the subpoena is sought." *United States v. Barnes*, 2008 WL 9359654, at *3 (S.D.N.Y. Apr. 2, 2008) (emphasis added); *see also United States v. Rich*, 1984 WL 845, at *3 (S.D.N.Y. Sept. 7, 1984) (granting motion to quash because defendants "failed to show that the requested materials *in fact* contain any evidence that would be admissible at trial"); *United States v. Treacy*, 2008 WL 5082884, at *2 (S.D.N.Y. Dec. 1, 2008) (denying application for subpoena because, "[f]ar from showing the subpoenaed documents are admissible, [the defendant] only argue[d] that the documents [we]re 'likely to be admissible."). In Defendants' view, they can just list a few hearsay exceptions and call it a day, and Defendants do not even attempt to respond to Nonparty-1's arguments for why none of the communications would be admissible as evidence of then-existing mental or emotional condition or as business records. (Mem. at 10-12.)

Defendants do continue to speculate that the documents may contain statements admissible under the hearsay exception for "statements against interest," but the best they can do is offer three statements in one of the numerous communications they already have and suggest, without any analysis whatsoever, that these are admissible as statements against interest. (Opp. at 14-16.) But even these admissibility arguments fail because none of these three phrases are statements against interest under Fed. R. Evid. 804(b)(3). *See United States v. Shestakov*, 2025 WL 507523, at *4 (S.D.N.Y. Feb. 14, 2025) (denying application because defendant "has not explained how he could meet the elements of" the hearsay exceptions he claimed). Defendants also provide no reason to

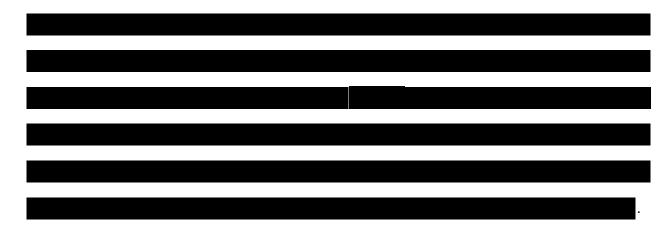
think that cor	nmunications	sought by	Request	Numbers	5, 6 and	l 7 would	d contain	statements	like
these.									

-	

B. <u>Defendants failed to establish relevance.</u>

Rather than offer non-speculative arguments that the documents contain statements that make a fact of consequence more or less probable, Defendants continue their pattern of quoting allegations from the Superseding Indictment and then making the conclusory speculation that the requested communications will relate in some unspecified way to those allegations. For example, Defendants quote the allegation concerning their "reject[ion]' of the Victim Traders' 'requests to

return the stolen cryptocurrency," and steps taken "to hide their ill-gotten gains" and then
conclude without further explanation that the requested communication will be relevant to these
issues
Defendants' other speculations about possible relevance are similarly infirm. <i>First</i> , even
if "pseudonymity is a widespread value and practice in the trading environment" (id. at 15) is a
fact of consequence in this action,
would not be meaningfully probative of this fact, and Defendants
already possess documents reflecting the irrelevant fact. Second,
. Third,
whether Defendants "did not return the funds when asked to do so by the sandwichers or other
participants in the Ethereum Network" (id. at 16) may be a matter of consequence, although it
seems wildly implausible that this will be a contested fact at trial. But even if it is, Defendants'
suggestion that the requested communications will make this fact more or less likely because



C. These requests are overbroad.

Defendants argue that Request Numbers 4-7 are not overbroad because they are "subject-matter limited." (*Id.* at 18.) But the subject matter to which they are limited (anything "regarding the incident referenced in the Indictment") is itself overbroad. *See United States v. Bergstein*, 2018 WL 9539856, at *1 (S.D.N.Y. Jan. 22, 2018) (denying as a "classic 'fishing expedition'" a "request for all communications relating in any way to most of the indictment"), *aff'd*, 788 F. App'x 742, 746 (2d Cir. 2019). Many documents that relate in some way to an incident mentioned in an indictment do not make any fact of consequence more or less likely or are not admissible.

While Defendants have utterly failed to establish relevance with respect to any fact of consequence, if the Court were to find that they have made a showing that some requested documents are relevant to any fact of consequence, these requests should be limited to communications related to those facts of consequence.³

-

³ Defendants' demand that Nonparty-1 articulate its bases for asserting attorney-client privilege or work-product protection "immediately," rather than at the time it produces documents (should this Motion be denied), is baseless.

IV. The Court Should Quash Request Numbers 8 and 9 (other MEV Bots, financial records)

Defendants concede that Request Numbers 8 and 9 do not seek documents about the Exploit or any other aspect of the crime with which they are charged. Rather than articulate how the requested documents are relevant to the crime with which they are charged, Defendants suggest that the sparse appearance of the words "arbitrage" and "typically" in the Superseding Indictment makes whether the Victim Traders' trading activity was typical arbitrage a matter of consequence, which in turn makes relevant all records about all trades ever made by Victim Traders or the profits from those trades.

As a preliminary matter, this argument is based on an obviously incorrect reading of Paragraph 13 of the Superseding Indictment. Defendants falsely claim that Paragraph 13 includes allegations that "the alleged victims were engaged in 'typical[]' trading and 'typical[]' 'arbitrage'." (Opp. at 19.) Paragraph 13 contains no such allegation. It states that a "searcher is effectively a trader who scans the mempool for profitable arbitrage opportunities using automated bots" and "sends the builder a proposed 'bundle' of transactions," and then, as discussed above, notes that the proposed "bundle typically consists of the following transactions in a precise order" and lists three transaction types. Rewriting this allegation as an assertion that the Victim Traders' trades were "typical[]" trading and "typical[]" "arbitrage" is disingenuous, particularly after their misreading has been pointed out to them. The paragraph is plainly a general description of searchers and the bundles searchers propose as relevant to the offenses alleged in the Superseding Indictment. It does not mention the Victim Traders, and even under the Defendants' strained reading does not imply that the Victim Traders, or any other searcher, engaged in trading that was "typical" in any sense other than involving proposing bundles consisting of transactions to be executed in a precise order. Even if the Superseding Indictment did allege that the Victim Traders'

trades were typical in every way, which it does not, information about Nonparty-1's other MEV Bots and its financial information does not, as Defendants assert without explanation, reveal "what is a typical trader, what is a typical trade, and what typical traders expect." (Opp. at 19-20.) Accordingly, Paragraph 13 does not create a license for Defendants to go on an unfettered fishing expedition through records concerning their victims' trades.

Neither can Defendants manufacture a matter of consequence by stating that "[t]he exploitative nature of sandwich trading bears on the norms and expectations in the trading environment." (*Id.* at 20.) As discussed above, the Superseding Indictment does not make *all* possible expectations into facts of consequence, only the expectation that bundles will be executed only in a particular order, and Defendants have failed to establish that Nonparty-1's overall financial performance or the identity of other bots not involved in the Exploit make that fact more or less likely.

Similarly, Defendants' argument that the identity of Nonparty-1's bots is "relevant to what is 'typical'" (*id.*) fails because the general "typicality" of the Victim Traders' trades and bots is not a fact of consequence, and Defendants only were able to suggest it was through a preposterous misreading of the Superseding Indictment. The Superseding Indictment in no way suggests that the Victim Traders' specific "sandwich strategies" were all typical, or that their "moral and legal reservations" were typical, or that were typical. (*Id.*) By resorting to this argument, Defendants merely underscore the irrelevance of Requests Numbers 8 and 9.

CONCLUSION

For the reasons stated herein and in the previously filed Memorandum, the Court should grant Nonparty-1's motion to quash.

Dated: June 13, 2025 Respectfully submitted,

PRYOR CASHMAN LLP

By: <u>/s/ Jeffrey Alberts</u>

Jeffrey Alberts Aaron Wiltse

7 Times Square, Suite Level 40 New York, NY 10036

New York, NY 10036 Tel: 212-326-0800

Email: jalberts@pryorcashman.com

Counsel for Nonparty-1

CERTIFICATE OF SERVICE

I hereby certify that on June 13, 2025, I electronically filed the foregoing document with the Clerk of Court using the CM/ECF system which will send notification of such filing to all counsel of record in this matter who are on the CM/ECF system.

Dated: June 13, 2025

Jeffrey Alberts